

## CLAIMS

1. A communication system, comprising a first access  
router belonging to a first subnet and a second access  
5 router belonging to a second subnet, said first access  
router and said second access router being connected via  
IP network, and a mobile terminal is connected to said  
first subnet and said second subnet via radio  
communication, wherein:

10 the mobile terminal connected to said first subnet  
requests a link local address of said second access  
router in said second subnet to said first access router  
under the condition being connected to said first subnet  
after deciding that handover to said second subnet is to  
15 be executed, and said first access router provides said  
link local address of said second access router to said  
mobile terminal.

2. A communication system, comprising a first access  
20 router belonging to a first subnet and a second access  
router belonging to a second subnet, said first access  
router and said second access router being connected via  
IP network, and a mobile terminal is connected to said  
first subnet and said second subnet via radio  
25 communication, wherein:

the mobile terminal connected to said first subnet requests a link local address of a default router in said second subnet to said first access router under the condition being connected to said first subnet after  
5 deciding that handover is to be executed to said second subnet, and said first access router provides said link local address of said default router to said mobile terminal.

10 3. The communication system according to claim 1, wherein said first access router provides information included in an RA message sent within said second subnet by said second access router together with said link local address of said second access router to said  
15 mobile terminal.

4. The communication system according to claim 2, wherein said first access router provides information included in an RA message sent within said second subnet  
20 by said default router together with said link local address of said default router to said mobile terminal.

5. The communication system according to claim 1 or 2, wherein said mobile terminal refers to said link local  
25 address when packet transmission is performed to outside

of said second subnet after handover is executed from said first subnet to said second subnet.

6. The communication system according to claim 1 or 2,  
5 wherein said mobile terminal requests said link local address to said first access router when transmitting a message P to request information relating to said second access router.

10 7. The communication system according to claim 6,  
wherein said mobile terminal is arranged to add information to instruct a request of said link local address in said message P, said first access router acquires said link local address relating to a subnet  
15 specified by information in said message P and transmits a message Q including said link local address to said mobile terminal by incorporating said link local address in the message Q, which is a response message of said message P.

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8. The communication system according to claim 6,  
wherein said mobile terminal is arranged to transmit information to request said link local address different from said message P to said first access router, said  
25 first access router is arranged to acquire said link

local address relating to a subnet specified by at least one of information to request said link local address and information in said message P received from said mobile terminal and transmits a notifying message  
5 including said link local address to said mobile terminal by incorporating said link local address in a notifying message different from the message Q, which is a response message of said message P.

10 9. The communication system according to claim 6, wherein said mobile terminal is arranged to add information to instruct a request of said link local address in said message P, and said first access router acquires said link local address relating to a subnet  
15 specified by at least one of information to request said link local address and information in said message P received from said mobile terminal and transmits a notifying message including said link local address to said mobile terminal by incorporating said link local  
20 address in a notifying message different from a message Q, which is a response message of said message P.

10. The communication system according to claim 6, wherein said mobile terminal is arranged to transmit  
25 information to request said link local address different

from said message P to said first access router, and  
said first access router acquires said link local  
address relating to a subnet specified by information in  
said message P and transmits said message Q including  
5 said link local address to said mobile terminal by  
incorporating said link local address in the message Q,  
which is a response message of said message P.

11. The communication system according to claim 1 or 2,  
10 wherein said first access router acquires said link  
local address relating to a subnet specified by  
information in said message when a message P to request  
information relating to said second access router is  
received from said mobile terminal and transmits said  
15 message Q including said link local address to said  
mobile terminal by incorporating said link local address  
in a message Q, which is a response message of said  
message P.

20 12. The communication system according to claim 1 or 2,  
wherein said first access router acquires said link  
local address relating to a subnet specified by  
information in said message P when said message P is  
received from said mobile terminal, acquires said link  
25 local address and transmits a notifying message

including said link local address to said mobile terminal by incorporating said link local address in a notifying message different from a message Q, which is a response message of said message P.

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13. The communication system according to claim 1 or 2, wherein said mobile terminal is arranged to request said link local address to said first access router when transmitting a message R to request to forward a packet  
10 addressed to said mobile terminal to said second access router.

14. The communication system according to claim 13, wherein said mobile terminal is arranged to add  
15 information to request said link local address in said message R, said first access router acquires said link local address relating to a subnet specified by at least one of information in said message R, a message P to request information relating to said second access  
20 router, and information in said message P received from said mobile terminal already before the receiving of said message R and transmits said message S including said link local address to said mobile terminal by incorporating said link local address in a message S,  
25 which is a response message of said message R.

15. The communication system according to claim 13,  
wherein said mobile terminal is arranged to transmit  
information to request said link local address different  
5 from said message R to said first access router, said  
first access router acquires said link local address  
relating to a subnet specified by at least one of  
information to request said link local address,  
information in said message R received from said mobile  
10 terminal, a message P to request information relating to  
said second access router, and information in said  
message P received from said mobile terminal already  
before the receiving of said message R, and transmits a  
notifying message including said link local address to  
15 said mobile terminal by incorporating said link local  
address in a notifying message different from the  
message S, which is a response message of said message R.

16. The communication system according to claim 13,  
20 wherein said mobile terminal is arranged to add  
information to request said link local address in said  
message R, and said first access router acquires said  
link local address relating to a subnet specified by at  
least one of information to request said link local  
25 address, information in said message R received from

said mobile terminal, a message P to request information relating to said second access router, and information in said message P received from said mobile terminal already before the receiving of said message R, and  
5 transmits a notifying message including said link local address to said mobile terminal by incorporating said link local address in a notifying message different from the message S, which is a response message of said message R.

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17. The communication system according to claim 13, wherein said mobile terminal is arranged to transmit information to request said link local address different from said message to said first access router, and said  
15 first access router acquires said link local address relating to a subnet specified by at least one of information in said message R, information of the message P to request information relating to said second access router, and information in said message P  
20 received from said mobile terminal already before the receiving of said message R, and transmits said message S including said link local address to said mobile terminal by incorporating said link local address in the message S, which is a response message of said message R.

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18. The communication system according to claim 1 or 2,  
wherein said first access router acquires, when said  
message R is received from said mobile terminal, said  
link local address relating to a subnet specified by at  
5 least one of information in said message R, a message P  
to request information relating to said second access  
router, and information in said message P received from  
said mobile terminal already before the receiving of  
said message R, and transmits said message S including  
10 said link local address to said mobile terminal by  
incorporating said link local address in a message S,  
which is a response message of said message R.

19. The communication system according to claim 1 or 2,  
15 wherein said first access router acquires, when said  
message R is received from said mobile terminal, said  
link local address relating to a subnet specified by at  
least one of information in said message R, information  
in the message P to request information relating to said  
20 second access router, and information in said message P  
received from said mobile terminal already before the  
receiving of said message R, and transmits a notifying  
message including said link local address to said mobile  
terminal by incorporating said link local address to a  
25 notifying message different from a message S, which is a

response message of said message R.

20. The communication system according to claim 16,  
wherein said first access router is arranged to request  
5 said link local address to said second access router  
when transmitting a message T to request the initiation  
of processing of the handover relating to said mobile  
terminal.

10 21. The communication system according to claim 17,  
wherein said first access router is arranged to request  
said link local address to said second access router  
when transmitting a message T to request the initiation  
of processing of the handover relating to said mobile  
15 terminal.

22. The communication system according to claim 20,  
wherein said first access router is arranged to add  
information to request said link local address in said  
20 message T, and said second access router acquires said  
link local address relating to said second subnet, to  
which said second access router belongs, and transmits  
said message U including said link local address to said  
first access router by incorporating said link local  
25 message in the message U, which is a response message of

said message T.

23. The communication system according to claim 20,  
wherein said first access router is arranged to transmit  
5 information to request said link local address different  
from said message T to said second access router, said  
second access router acquires said link local address  
relating to said second subnet, to which said second  
access route belongs, and transmits a notifying message  
10 including said link local address to said first access  
router by incorporating said link local address in a  
notifying message different from a message U, which is a  
response message of said message T.
- 15 24. The communication system according to claim 20,  
wherein said first access router is arranged to add  
information to request said link local address in said  
message T, and said second access router acquires said  
link local address relating to said second subnet, to  
20 which said second access router belongs, and transmits a  
notifying message including said link local address to  
said first access router by incorporating said link  
local address in a notifying message different from the  
message U, which is a response message of said message T.

25. The communication system according to claim 20,  
wherein said first access router is arranged to transmit  
information to request said link local address different  
from said message T to said second access router, and  
5 said second access router acquires said link local  
address relating to said second subnet, to which said  
second access router belongs, and transmits said message  
U including said link local address to said first access  
router by incorporating said link local address in the  
10 message U, which is a response message of said message T.

26. The communication system according to claim 16,  
wherein said second access router acquires, when said  
message T is received from said first access router,  
15 said link local address relating to said second subnet,  
to which said second access router belongs, and  
transmits said message including said link local address  
to said first access router by incorporating said link  
local address in the message U, which is a response  
20 message of said message T.

27. The communication system according to claim 17,  
wherein said second access router acquires, when said  
message T is received from said first access router,  
25 said link local address relating to said second subnet,

to which said second access router belongs, and  
transmits said message including said link local address  
to said first access router by incorporating said link  
local address in the message U, which is a response  
5 message of said message T.

28. The communication system according to claim 16,  
wherein said second access router acquires, when said  
message T is received from said first access router,  
10 said link local address relating to said second subnet,  
to which said second access router belongs, and  
transmits a notifying message including said link local  
address to said first access router by incorporating  
said link local address in a notifying message different  
15 from the message U, which is a response message of said  
message T.

29. The communication system according to claim 17,  
wherein said second access router acquires, when said  
20 message T is received from said first access router,  
said link local address relating to said second subnet,  
to which said second access router belongs, and  
transmits a notifying message including said link local  
address to said first access router by incorporating  
25 said link local address in a notifying message different

from the message U, which is a response message of said message T.

30. A communication system, comprising a first access  
5 router belonging to a first subnet and a second access  
router belonging to a second subnet, said first access  
router and said second access router being connected via  
IP network, and a mobile terminal is connected to said  
first subnet and said second subnet via radio  
10 communication, wherein:

under the condition that said mobile terminal is  
connected to said first subnet, said first access router  
transmits a message W to instruct the execution of  
handover to said second subnet including said link local  
15 address of said second access router to said mobile  
terminal.

31. A communication system, comprising a first access  
router belonging to a first subnet and a second access  
20 router belonging to a second subnet, said first access  
router and said second access router being connected via  
IP network, and a mobile terminal is connected to said  
first subnet and said second subnet via radio  
communication, wherein:

25 under the condition that said mobile terminal is

connected to said first subnet, said first access router transmits a message W including said link local address of a default router in said second subnet and instructing the execution of handover to said second  
5 subnet.

32. The communication system according to claim 30, wherein said first access router is arranged to provide information included in an RA message sent in said  
10 second subnet by said second access router together with said link local address of said second access router to said mobile terminal.

33. The communication system according to claim 31, wherein said first access router is arranged to provide information included in an RA message sent in said  
15 second subnet by said default router together with said link local address of said default router to said mobile terminal.

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34. The communication system according to claim 30 or 31, wherein said mobile terminal is arranged to refer to said link local address when transmitting a packet to outside of said second subnet after executing the  
25 handover from said first subnet to said second subnet.

35. A mobile terminal in a communication system,  
comprising a first access router belonging to a first  
subnet, and a second access router belonging to a second  
5 subnet different from said first subnet, said first  
access router and said second access router being  
connected via IP network, and connection to said first  
subnet or said second subnet can be executed via radio  
communication, wherein said mobile terminal comprises:

10 means for requesting a link local address of said  
second access router in said second subnet to said first  
access router under the condition being connected to  
said first subnet when the handover is executed from  
said first subnet to said second subnet; and

15 means for receiving said link local address of said  
second access router from said first access router.

36. A mobile terminal in a communication system,  
comprising a first access router belonging to a first  
20 subnet, and a second access router belonging to a second  
subnet different from said first subnet, said first  
access router and said second access router being  
connected via IP network, and connection to said first  
subnet or said second subnet can be executed via radio  
25 communication, wherein said mobile terminal comprises:



means for requesting a link local address of a default router in said second subnet to said first access router under the condition being connected to said first subnet when the handover is executed from  
5 said first subnet to said second subnet; and

means for receiving said link local address of said default router from said first access router.

37. The mobile terminal according to claim 35, wherein  
10 there is provided means for receiving information included in an RA message sent in said second subnet by said second access router from said first access router.

38. The mobile terminal according to claim 36, wherein  
15 there is provided means for receiving information included in an RA message sent in said second subnet by said default router from said first access router.

39. The mobile terminal according to claim 35 or 36,  
20 wherein there is provided means to refer to said link local address when a packet is transmitted to outside of said second subnet after executing the handover from said first subnet to said second subnet.

25 40. The mobile terminal according to claim 35 or 36,

wherein there is provided means for requesting said link local address to said first access router when transmitting a message P to request information relating to said second access router.

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41. The mobile terminal according to claim 40, wherein there are provided:

means for adding information to request said link local address in said message P;

10 means for receiving a message Q including said link local address, which is a response message of said message P from said first access router; and

means for extracting said link local address from said message Q.

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42. The mobile terminal according to claim 40, wherein there are provided:

means for generating information to request said link local address different from said message P and for  
20 transmitting it to said first access router;

means for receiving a notifying message different from the message Q, which is a response message of said message P, and said notifying message including said link local address from said first access router; and

25 means for extracting said link local address from

said notifying message.

43. The mobile terminal according to claim 40, wherein there are provided:

5 means for adding information to request said link local address in said message P;

means for receiving a notifying message different from the message Q, which is a response message of said message P, and said notifying message including said link local address from said first access router; and

10 means for extracting said link local address from said notifying message.

44. The mobile terminal according to claim 40, wherein there are provided:

15 means for generating information to request said link local address different from said message P and for transmitting it to said first access router;

20 means for receiving a message Q including said link local address, being a response message to said message P, from said first access router; and

means for extracting said link local address from said message Q.

25 45. The mobile terminal according to claim 35 or 36,

wherein there are provided:

means for receiving a message Q including said link local address, being a response message of said message P, from said first access router as a response thereto  
5 after transmitting the message P to request information relating to said second access router; and

means for extracting said link local address from said message Q.

10 46. The mobile terminal according to claim 35 or 36, wherein there are provided:

means for receiving said notifying message including said link local address, being a notifying message different from the message Q, which is a response  
15 message of said message P, from said first access router as a response thereto after transmitting the message P to request information relating to said second access router; and

means for extracting said link local address from  
20 said notifying message.

47. The mobile terminal according to claim 35 or 36, wherein there is provided means for requesting said link local address to said first access router when  
25 transmitting a message R to request to forward a packet

addressed to said mobile terminal to said second access router.

48. The mobile terminal according to claim 47, wherein  
5 there are provided;

means for adding information to request said link local address in said message R;

means for receiving a message S including said link local address, which is a response message of said  
10 message R, from said first access router; and

means for extracting said link local address from said message S.

49. The mobile terminal according to claim 47, wherein  
15 there are provided:

means for generating information to request said link local address different from said message R and for transmitting it to said first access router;

means for receiving said notifying message including  
20 said link local address, being a notifying message different from the message S, which is a response message of said message R, from said first access router; and

means for extracting said link local address from  
25 said notifying message.

50. The mobile terminal according to claim 47, wherein there are provided:

means for adding information to request said link  
5 local address in said message R;

means for receiving said notifying message including  
said link local address, being a notifying message  
different from the message S, which is a response  
message of said message R, from said first access  
10 router; and

means for extracting said link local address from  
said notifying message.

51. The mobile terminal according to claim 47, wherein  
15 there are provided:

means for generating information to request said  
link local address different from said message R and for  
transmitting it to said first access router;

means for receiving a message S including said link  
20 local address, being a response message of said message  
R, from said first access router; and

means for extracting said link local address from  
said message S.

25 52. The mobile terminal according to claim 35 or 36,

wherein there are provided:

means for receiving a message S' including said link local address, which is a response message of said message R, from said first access router as a response  
5 after transmitting said message R; and

means for extracting said link local address from said message S.

53. The mobile terminal according to claim 35 or 36,  
10 wherein there are provided:

means for receiving said notifying message including said link local address, being a message different from the message S, which is a response message of said message R, from said first access router as a response  
15 after transmitting said message R; and

means for extracting said link local address from said notifying message.

54. A mobile terminal in a communication system,  
20 comprising a first access router belonging to a first subnet, and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router, being connected via IP network, and connection to said first  
25 subnet or said second subnet can be executed via radio

communication, wherein said mobile terminal comprises:

means for receiving a message W to instruct the execution of the handover to said second subnet from said first access router, said message including said link local address of said second access router.

55. A mobile terminal in a communication system, comprising a first access router belonging to a first subnet, and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, and connection to said first subnet or said second subnet can be executed via radio communication, wherein said mobile terminal comprises:

means for receiving a message W to instruct the execution of handover to said second subnet from said first access router, said message including said link local address of a default router in said second subnet.

56. The mobile terminal according to claim 54, wherein there is provided:

means for receiving information included in an RA message sent in said second subnet by said second access router from said first access router.



57. The mobile terminal according to claim 55, wherein there is provided means for receiving information included in an RA message sent in said second subnet by said default router from said first access router.

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58. The mobile terminal according to claim 54 or 55, wherein there is provided means for referring to said link local address when a packet is transmitted to outside of said second subnet after executing the  
10 handover to said second subnet from said first subnet.

59. An access router in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second  
15 subnet different from said first subnet, said first access router and said second access router being connected via IP network and can be connected to a mobile terminal via radio communication, wherein there are provided:

20 means for receiving a request of a link local address of said second access router in said second subnet from said mobile terminal connected to said first subnet and deciding the execution of handover to said second subnet;

25 means for acquiring said link local address of said

second access router; and

means for providing said link local address of said second access router to said mobile terminal.

5 60. An access router in a communication system,  
comprising a first access router belonging to a first  
subnet and a second access router belonging to a second  
subnet different from said first subnet, said first  
access router and said second access router being  
10 connected via IP network and can be connected to a  
mobile terminal via radio communication, wherein there  
are provided:

means for receiving a request of a link local  
address of a default router in said second subnet from  
15 said mobile terminal connected to said first subnet and  
deciding the execution of handover to said second  
subnet;

means for acquiring said link local address of said  
default router; and

20 means for providing said link local address of said  
default router to said mobile terminal.

61. The access router according to claim 59, wherein  
there is provided means for giving information included  
25 in an RA message sent in said second subnet by said

second access router together with said link local address of said second access router to said mobile terminal.

5 62. The access router according to claim 60, wherein there is provided means for giving information included in an RA message sent in said second subnet by said default router together with said link local address of said default router to said mobile terminal.

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63. The access router according to claim 59 or 60, wherein there is provided means for receiving a request of said link local address from said mobile terminal when receiving a message P to request information  
15 relating to said second access router from said mobile terminal.

64. The access router according to claim 63, wherein there are provided:

20 means for acquiring said link local address relating to a subnet specified by information in said message P in case information to request said link local address added in said message P is received as a request of said link local address from said mobile terminal; and

25 means for generating said message Q including said

link local address to said mobile terminal by  
incorporating said link local address in the message Q,  
which is a response message of said message P.

5 65. The access router according to claim 63, wherein  
there are provided:

means for acquiring said link local address relating  
to a subnet specified by at least one of information to  
request said link local address and information in said  
10 message P received from said mobile terminal when  
information to request said link local address different  
from said message P is received as a request of said  
link local address from said mobile terminal; and

means for generating a notifying message including  
15 said link local address by incorporating said link local  
address in a notifying message different from the  
message Q, which is a response message of said message P,  
and for transmitting said notifying message to said  
mobile terminal.

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66. The access router according to claim 63, wherein  
there are provided:

means for acquiring said link local address relating  
to a subnet specified by information in said message P  
25 when information to request said link local address

added in said message P is received as a request of said link local address from said mobile terminal; and

means for generating said notifying message including said link local address by incorporating said link local address in a notifying message different from the message Q, which is a response message of said message P, and for transmitting said notifying message to said mobile terminal.

67. The access router according to claim 63, wherein there are provided:

means for acquiring said link local address relating to a subnet specified by at least one of information to request said link local address and information in said message P received from said mobile terminal when information to request said link local address different from said message P is received as a request of said link local address from said mobile terminal; and

means for generating said message Q including said link local address by incorporating said link local address in the message Q, which is a response message of said message P, and for transmitting said message Q to said mobile terminal.

68. The access router according to claim 59 or 60,

wherein there are provided:

means for acquiring said link local address relating to a subnet specified by information in said message P when the message P to request information relating to  
5 said second access router is received from said mobile terminal; and

means for generating said message Q including said link local address by incorporating said link local address in the message Q, which is a response message of  
10 said message P and for transmitting said message Q to said mobile terminal.

69. The access router according to claim 59 or 60, wherein there are provided:

15 means for acquiring said link local address relating to a subnet specified by information in said message P when the message P to request information relating to said second access router is received from said mobile terminal; and

20 means for generating said notifying message including said link local address by incorporating said link local address in the notifying message different from the message Q, which is a response message of said message P, and for transmitting said notifying message  
25 to said mobile terminal.

70. The access router according to claim 59 or 60,  
wherein there is provided means for receiving a request  
of said link local address from said mobile terminal  
5 when receiving the message R to request to forward a  
packet addressed to the mobile terminal from said mobile  
terminal to said second access router.

71. The access router according to claim 70, wherein  
10 there are provided:

means for acquiring said link local address relating  
to a subnet specified by at least one of information in  
said message R, information of the message P to request  
information relating to said second access router, and  
15 information in said message P received from said mobile  
terminal already before the receiving of said message R;  
and

means for generating said message S including said  
link local address by incorporating said link local  
20 address in a message S, which is a response message of  
said message R, and for transmitting said message S to  
said mobile terminal.

72. The access router according to claim 70, wherein  
25 there are provided:

means for acquiring said link local address relating to a subnet specified by at least one of information to request said link local address, information in said message R received from said mobile terminal, and  
5 information of in the message P to request information relating to said second access router, and information in said message P received from said mobile terminal already before the receiving of said message R when information to request said link local address different  
10 from said message R is received as a request of said link local address from said mobile terminal; and

means for generating a notifying message including said link local address by incorporating said link local address in the notifying message different from the  
15 message S, which is a response message of said message R, and for transmitting said notifying message to said mobile terminal.

73. The access router according to claim 70, wherein  
20 there are provided:

means for acquiring said link local address relating to a subnet specified by at least one of information in said message R, information in the message P to request information relating to said second access router, and  
25 information in said message P received from said mobile



terminal already before the receiving of said message R when information to request said link local address added in said message R is received as a request of said link local address from said mobile terminal; and

5        means for generating said notifying message including said link local address by incorporating said link local address in a notifying message different from the message S, which is a response message of said message R, and for transmitting said notifying message  
10    to said mobile terminal.

74. The access router according to claim 70, wherein there are provided:

      means for acquiring said link local address relating  
15    to a subnet specified by at least one of information to request said link local address, information in said message R received from said mobile terminal,  
      information in the message P to request information relating to said second access router, and information  
20    in said message P received from said mobile terminal already before the receiving of said message R when information to request said link local address different from said message R is received as a request of said link local address from said mobile terminal; and  
25        means for generating said message S including said

link local address by incorporating said link local address in the message S, which is a response message of said message R, and for transmitting said message S to said mobile terminal.

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75. The access router according to claim 59 or 60, wherein there are provided:

means for acquiring said link local address relating to a subnet specified by at least one of information in said message R, and information in the message P to request information relating to said second access router, and information in the message P received from said mobile terminal already before the receiving of said message R when said message R is received from said mobile terminal; and

means for generating said message S including said link local address by incorporating said link local address in the message S, which is a response message of said message R, and for transmitting said message S to said mobile terminal.

20

76. The access router according to claim 59 or 60, wherein there are provided:

means for acquiring said link local address relating to a subnet specified by at least one of information in

25

said message R, information in the message P to request information relating to said second access router, and information in said message P received from said mobile terminal already before the receiving of said message R  
5 when said message R is received from said mobile terminal; and

means for generating said notifying message including said link local address by incorporating said link local address in a notifying message different from  
10 the message S, which is a response message of said message R, and for transmitting said notifying message to said mobile terminal.

77. The access router according to claim 71, wherein  
15 there is provided means for requesting said link local address to said second access router when transmitting a message T to request the initiation of the handover processing relating to said mobile terminal.

20 78. The access router according to claim 72, wherein there is provided means for requesting said link local address to said second access router when transmitting a message T to request the initiation of the handover processing relating to said mobile terminal.

79. The access router according to claim 77, wherein there are provided:

means for adding information to instruct a request of said link local address in said message T;

5 means for receiving a message U including said link local address, which is a response message of said message T, from said second access router; and

means for extracting said link local address from said message U.

10

80. The access router according to claim 77, wherein there are provided:

means for generating information to request said link local address different from said message T, and

15 for transmitting it to said second access router;

means for receiving a notifying message including said link local address from said second access router; and

20 means for extracting said link local address from said notifying message.

81. The access router according to claim 77, wherein there are provided:

25 means for adding information to instruct the request of said link local address in said message T;

means for receiving a notifying message including  
said link local address from said second access router;  
and

means for extracting said link local address from  
5 said notifying message.

82. The access router according to claim 77, wherein  
there are provided:

means for generating information to request said  
10 link local address different from said message T and for  
transmitting it to said second access router;

means for receiving a message U including said link  
local address, which is a response message of said  
message T, from said second access router; and

15 means for extracting said link local address from  
said message U.

83. The access router according to claim 71, wherein  
there are provided:

20 means for receiving the message U, including said  
link local address and being a response message of said  
message T from said second access router as a response  
after transmitting said message T; and

means for extracting said link local address from  
25 said message U.

84. The access router according to claim 72, wherein there are provided:

means for receiving a message U, including said link  
5 local address and being a response message of said message T, from said second access router as a response after transmitting said message T; and

means for extracting said link local address from said message U.

10

85. The access router according to claim 71, wherein there are provided:

means for receiving a notifying message including said link local address from said access router as a  
15 response after transmitting said message T; and

means for extracting said link local address from said notifying message.

86. The access router according to claim 72, wherein  
20 there are provided:

means for receiving a notifying message including said link local address from said access router as a response after transmitting said message T; and

means for extracting said link local address from  
25 said notifying message.

87. An access router in a communication system,  
comprising a first access router belonging to a first  
subnet and a second access router belonging to a second  
5 subnet different from said first subnet, said first  
access router and said second access router being  
connected via IP network and can be connected to a  
mobile terminal via radio communication, wherein there  
are provided:

10 means for receiving a link local address of said  
second access router in said second subnet from said  
mobile terminal connected to said first subnet and  
deciding the execution of handover to said second  
subnet;

15 means for acquiring said link local address of said  
second access router; and

means for transmitting a message including said link  
local address of said second access router and  
instructing the execution of handover to said second  
20 subnet, to said mobile terminal.

88. An access router in a communication system,  
comprising a first access router belonging to a first  
subnet and a second access router belonging to a second  
25 subnet different from said first subnet, said first

access router and said second access router being connected via IP network and can be connected to a mobile terminal via radio communication, wherein there are provided:

5        means for receiving a request of a link local address of a default router in said second subnet from said mobile terminal connected to said first subnet and deciding the execution of handover to said second subnet;

10       means for acquiring said link local address of said default router; and

      means for transmitting a message W including said link local address of said second access router and instructing the execution of handover to said second  
15 subnet, to said mobile terminal.

89. The access router according to claim 87, wherein there is provided means for giving information included in an RA message sent in said second subnet by said  
20 second access router together with said link local address of said second access router to said mobile terminal.

90. The access router according to claim 88, wherein  
25 there is provided means for giving information included



in an RA message sent in said second subnet by said default router together with said link local address of said default router to said mobile terminal.

5 91. An access router in a communication system,  
comprising a first access router belonging to a first  
subnet and a second access router belonging to a second  
subnet different from said first subnet, said first  
access router and said second access router being  
10 connected via IP network and can be connected to a  
mobile terminal via radio communication, wherein there  
is provided:

means for receiving a request of said link local  
address of said second access router from said first  
15 access router when receiving a message T to request the  
initiation of the handover processing relating to said  
mobile terminal from said first access router.

92. An access router in a communication system,  
20 comprising a first access router belonging to a first  
subnet and a second access router belonging to a second  
subnet different from said first subnet, said first  
access router and said second access router being  
connected via IP network and can be connected to a  
25 mobile terminal via radio communication, wherein there

is provided:

means for receiving a request of said link local address of a default router in said second subnet from said first access router when receiving a message T to  
5 request the initiation of the handover processing relating to said mobile terminal from said first access router.

93. The access router according to claim 91, wherein  
10 said second access router provides information included in RA message sent in said second subnet by said second access router together with said link local address of said access router to said first access router.

15 94. The access router according to claim 92, wherein said default router provides information included an RA message sent in said second subnet by said default router together with said link local address of said default router to said first access router.

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95. The access router according to claim 91 or 92, wherein there are provided:

means for receiving information to instruct a request of said link local address added in said message  
25 T as a request of said link local address from said

first access router;

means for acquiring said link local address when  
said message T added with information to instruct a  
request of said link local address is received from said

5 first access router; and

means for generating said message U including said  
link local address by incorporating said link local  
address in the message U, which is a response message of  
said message T, and for transmitting said message U to

10 said first access router.

96. The access router according to claim 91 or 92,  
wherein there are provided:

means for receiving information to request said link  
15 local address different from said message T as a request  
of said link local address from said first access  
router;

means for acquiring said link local address when  
information to request said link local address is  
20 received from said first access router; and

means for generating a notifying message including  
said link local address by incorporating said link local  
address in a notifying message different from the  
message U, which is a response message of said message T,  
25 and for transmitting said notifying message to said

first access router.

97. The access router according to claim 91 or 92,  
wherein there are provided:

5        means for receiving information to request said link  
local address added in said message T as a request of  
said link local address from said first access router;

      means for acquiring said link local address when  
said message T added with information to request said  
10 link local address is received from said first access  
router; and

      means for generating a notifying message including  
said link local address by incorporating said link local  
address in a notifying message different from the  
15 message U, which is a response message to said message T,  
and for transmitting said notifying message to said  
first access router.

98. The access router according to claim 91 or 92,  
20 wherein there are provided:

      means for receiving information to request said link  
local address different from said message T as a request  
of said link local address from said first access  
router;

25        means for acquiring said link local address when

information to request said link local address is received from said first access router; and

means for generating said message U including said link local address by incorporating said link local address in the message U, which is a response message of said message T, and for transmitting said message U to said first access router.

99. The access router according to claim 91 or 92, wherein there are provided:

means for acquiring said link local address when said message T is received from said first access router; and

means for generating said message U including said link local address by incorporating said link local address in the message U, which is a response message of said message T, and for transmitting said message U to said first access router.

100. The access router according to claim 91 or 92, wherein there are provided:

means for acquiring said link local address when said message T is received from said first access router; and

means for generating a notifying message including

said link local address by incorporating said link local address in a notifying message different from the message U, which is a response message of said message T, and for transmitting said notifying message to said

5 first access router.